

## Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan
Commissioner

August 4, 2003

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

TO: Interested Parties / Applicant

RE: Indiana Packers Corp. F 015-16922-00027

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within (18) eighteen days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

**Enclosure** 

FNPER.wpd 8/21/02



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Lori F. Kaplan Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

# OFFICE OF AIR QUALITY

# Indiana Packers Corporation Hwy 421 South and County Road 100 North Delphi, Indiana 46923

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: 015-16922-00027				
Issued by:Original signed by Paul Dubenetzky	Issuance Date: August 4, 2003			
Paul Dubenetzky, Branch Chief Office of Air Quality	Expiration Date: August 4, 2008			

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#### SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary pork processing and rendering plant.

Authorized Individual: President

Source Address: Hwy 421 South and County Road 100 North, Delphi, Indiana 46023 Hwy 421 South and County Road 100 North, Delphi, Indiana 46023

General Source Phone: (765) 564-3680

SIC Code: 2077 County Location: Carroll

Source Location Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules or Emission Offset Rules;

Minor Source, Section 112 of the Clean Air Act

Not in 1 of 28 Source Categories

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) natural gas fired boilers (identified as B01 and B02), each rated at 29.3 MMBtu per hour and exhausting at Stack B01 and B02. These units were installed in 1990.
- (b) One (1) existing meat cooker used in conjunction with the inedible rendering process, a maximum process rate of 28,097 pounds of inedible meat products per hour and controlled by a stord scrubber system (identified as SC1) consisting of one (1) 7,000 cubic feet per minute (cfm) venturi scrubber, 7,000 cfm packed tower scrubber, and 60,000 cfm packed tower scrubber. This unit was constructed in 1990.
- (c) Two (2) natural gas fired carcass hair singe units (identified as HS1 and HS2), rated at 12.7 MMBtu per hour each and exhausting at Stack HS1 and HS2. These units were installed in 1990.
- (d) Three (3) smoke house operated in batch operations, each with a maximum throughput rate of 25.6 pounds of wood per hour and 5,000 pounds of pork per hour, controlled by GERMOS GmbH smoke house scrubber and exhausting to smoke vents 1, 2, and 3. These units were installed in 1990.
- (e) One (1) blood meal storage silo (identified as BL-1), with a maximum throughput rate of 6,552 tons per year and controlled by a baghouse. **Note:** The maximum throughput rate of the blood meal storage silo is being increased from 3,000 tons per year to 6,552 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.
- (f) One (1) bone meal storage silo (identified as BM-1), with a maximum throughput rate of 143,488 tons per year. **Note:** The maximum throughput rate of the bone meal storage

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silo is being increased from 40,000 tons per year to 143,488 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.

- (g) Two (2) natural gas fired Cleaver Brooks boilers (identified as B03 and B04), each with a heat input capacity of 40.587 MMBtu per hour and exhausting at Stack B03 and B04. B03 and B04 use No. 2 fuel oil as back up fuel each with heat input capacity of 38.683 MMBtu per hour and a sulfur content of 0.5%. These units will be installed in 2003.
- (h) One (1) Dupps meat cooker used in conjunction with the rendering process with a maximum process rate of 65,700 pounds of inedible meat products per hour and controlled by stord scrubber system (identified as SC1) consisting of two (2) air condensers, one (1) venturi scrubber and two (2) packed column scrubbers. The existing cooker will be replaced with the Dupps cooker and the control modified in 2003.

#### A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Rendering room scrubber (identified as SC2) associated with the rendering processes for controlling plant ventilation air emissions. This unit will be installed in 2003.
- (b) Natural gas-fired combustion sources each having a heat input equal to or less than ten million (10,000,000) Btu per hour, including heat input.
- (c) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the Permittee, that is, an on-site sewage treatment facility.
- (d) Other emergency equipment as follows: Stationary fire pumps.
- (e) Noncontact cooling tower systems with natural draft cooling tower not regulated under a NESHAP.
- (f) Other emission units and activities with potential emissions below the threshold in 326 IAC 2-7-1(21):
  - (1) Bulk truck loadout by products.
  - (2) Bulk truck loadout rendering process products.

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

#### A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted

by this permit.

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(b) All previous registrations and permits are superseded by this permit. Indiana Packers Corporation Page 9 of 49
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#### SECTION B GENERAL CONDITIONS

#### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

#### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

#### B.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

#### B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

#### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### B.8 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

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#### B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

#### B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

#### B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015 Indiana Packers Corporation Page 11 of 49
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The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

#### B.13 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or.

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

#### B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independently of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

# B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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#### B.16 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
  - (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
  If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

#### B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

#### B.18 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act:
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

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The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

#### B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

#### B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

#### B.23 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Section A.2.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.

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#### SECTION C SOURCE OPERATION CONDITIONS

#### **Entire Source**

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]
  - (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
  - (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (c) This overall source limit shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

#### C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

#### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

#### C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

  The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.
  - (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
  - (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
    - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
    - (2) If there is a change in the following:
      - (A) Asbestos removal or demolition start date;
      - (B) Removal or demolition contractor; or
      - (C) Waste disposal site.

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(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the applicable emission control procedures in 326 IAC
  14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are
  applicable for any removal or disturbance of RACM greater than three (3) linear feet on
  pipes or three (3) square feet on any other facility components or a total of at least 0.75
  cubic feet on all facility components.
- (f) Demolition and Renovation
  The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector be accredited is not federally enforceable.

#### Testing Requirements [326 IAC 2-8-4(3)]

#### C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015 Indiana Packers Corporation Page 21 of 49
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no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

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# C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.
- (d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

#### Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation.

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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#### C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:

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(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

# C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C -Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present

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or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

#### **Stratospheric Ozone Protection**

#### C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

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Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161. (c)

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#### SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

#### Facility Description [326 IAC 2-8-4(10)]:

(a) Two (2) natural gas fired boilers (identified as B01 and B02), each rated at 29.3 MMBtu per hour and exhausting to Stack B01 and B02. These units were installed in 1990.

(g) Two (2) natural gas fired Cleaver Brooks boilers (identified as B03 and B04), each with a heat input capacity of 40.587 MMBtu per hour and exhausting at Stack B03 and B04. B03 and B04 use No. 2 fuel oil as back up fuel each with heat input capacity of 38.683 MMBtu per hour and a sulfur content of 0.5 %. These units will be installed in 2003.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Emission Unit ID B01, B02, B03 and B04 as described in this section except when otherwise specified in 40 CFR Part 60, Subpart Dc.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the particulate emissions from the four (4) boilers (identified as B01, B02, B03 and B04) shall not each exceed the pounds per million British thermal units heat input limit as shown below:

Units	Fuel Type	Heat Input Capacity (MMBtu per hour)	Emission Rate (lbs/MMBtu)
B01 and B02	Natural Gas	58.6	0.38
	Natural Gas	81.2	0.30
Boiler B03 and B04	No. 2 Fuel Oil	77.4	0.30

These limitations are based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$
 Where  $Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.$ 

Q = Total source maximum operating capacity rating in million Btu per hour heat input

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [40 CFR, Subpart Dc] [326 IAC 12-1]

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

- (a) The SO<sub>2</sub> emissions from the 38.683 MMBtu per hour oil-fueled boilers shall not exceed five tenths (0.5) pounds per million Btu heat input; or
- (b) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

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Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

#### D.1.4 Fuel Usage Limitation [326 IAC 2-8-4]

The maximum amount of No. 2 fuel oil combusted in the Cleaver Brooks boilers (identified as B03 and B04), shall be limited to a total of 1,440,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. This No. 2 fuel usage limit is equivalent to a potential to emit of  $SO_2$  and NOx equal to 51.1 and 35.6 tons per year, respectively. Compliance with this fuel usage limitation renders 326 IAC 2-7 (Part 70 Permit Program) not applicable.

#### D.1.5 Opacity [40 CFR 60, Subpart Dc][326 IAC 12-1]

Pursuant to 40 CFR 60.43c(c) (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) and 326 IAC 12-1 (New Source Performance Standards), opacity from two (2) Cleaver Brooks boilers (identified as B03 and B04), when firing No. 2 fuel oil shall not exceed:

- (a) Twenty percent (20%) opacity (six minutes average), except for one six (6) minute period per hour of not more than twenty seven percent (27%) opacity; and
- (b) The opacity standard shall apply at all times, except during periods of startup, shutdown or malfunction.

#### D.1.6 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for these emission units.

#### **Compliance Determination Requirements**

#### D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1),(4)][326 IAC 2-1.1-11] [40 CFR 60, Subpart Dc]

- (a) Pursuant to 40 CFR 60.45c(a) (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the owner or operator of the two (2) Cleaver Brooks boilers (identified as B03 and B04), burning No.2 fuel oil each at a maximum heat input capacity of 38.683 MMBtu per hour and subject to the opacity standards under 40 CFR 60.43c(c), shall conduct an initial performance test utilizing Method 9 in accordance with 40 CFR 60.8.
- (b) The Permittee is not required to test the boilers (identified as B01, B02, B03 and B04), when burning natural gas, by this permit. However, IDEM, OAQ may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, OAQ, compliance with the Particulate Matter limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

#### D.1.8 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
  - (1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

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(2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

#### **Compliance Monitoring Requirements**

#### D.1.9 Visible Emissions Notations

- (a) Once per shift visible emission notations of the boilers stack exhausts (identified as B03 and B04) shall be performed during normal daylight operations when burning fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### **Record Keeping and Reporting Requirements**

#### D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2, D.1.3, and D.1.4, the Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel usage for each day since last compliance determination period and equivalent sulfur dioxide emissions;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period;

If the fuel supplier certification is used to demonstrate compliance, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information

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includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Conditions D.1.5 and D.1.9, the Permittee shall maintain records of visible emission notations of the two (2) boilers stack exhaust (identified as B03 and B04) when burning fuel oil No. 2 once per shift.
- (c) To document compliance with Condition D.1.6, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.11 Reporting Requirements

- (a) When No. 2 fuel oil is combusted and fuel supplier certifications are used to demonstrate compliance with Condition D.1.3, records of fuel supplier certifications and a certified statement that the records of the fuel supplier certifications represent all of the fuel combusted during the period shall be submitted to the address listed in Section C General Reporting Requirements, within thirty (30) days after the end of the six (6) month reporting period.
- (b) A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the address(es) listed in Section C General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the guarter being reported.
- (c) Pursuant to 40 CFR 60, §60.7, the owner of this source shall furnish the EPA and IDEM, OAQ, the following written notifications:
  - (1) Of the date construction is commenced for the two (2) Cleaver Brooks boilers (identified as B03 and B04), postmarked no later than 30 days after such date.
  - Of the anticipated date of initial startup of each boiler postmarked no more than 60 days nor less than 30 days prior to such date.
- (d) Pursuant to 40 CFR 60.48c(b), the owner or operator of the two (2) Cleaver Brooks boilers (identified as B03 and B04) burning No. 2 fuel oil, shall submit to IDEM, OAQ, the performance test data from the initial performance test.

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#### **SECTION D.2**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

The existing meat cooker associated with the inedible rendering process, at a maximum (b) process rate of 28,097 pounds of inedible meat products per hour and controlled by a stord scrubber system (identified as SC1) consisting of one (1) 7.000 cubic feet per minute (cfm) venturi scrubber, one (1) 7000 cfm packed tower scrubber, and one (1) 60,000 cfm packed tower scrubber. This unit was constructed in 1990.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### D.2.1 Particulate and Volatile Organic Compounds [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4:

- The potential to emit of PM10 from the inedible rendering process shall not exceed 15.2 (a) pounds of PM10 per hour. This limit is equivalent to 66.8 tons per year.
- (b) The potential to emit of VOC from the inedible rendering process shall not exceed 21.1 pounds of VOC per hour. This limit is equivalent to 92.6 tons per year.
- The potential to emit of H<sub>2</sub>S from the inedible rendering process shall not exceed 10.3 (c) pounds per hour of H<sub>2</sub>S. This is equivalent to 45 tons of per year hydrogen sulfide.

Compliance with D.2.1(a), D.2.1(b), and D.2.1(c) renders 326 IAC 2-7 (Part 70 Program) not applicable to the source. Compliance with D.2.1(c) renders 326 IAC 2-2 (PSD) not applicable.

#### Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New Facilities - General Reduction Requirements), the inedible rendering process is subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. The Stord scrubbing system is BACT.

#### D.2.3 Operation Of Meat Cooker

The existing meat cooker shall not operate while the Dupps meat cooker is in operation. The existing meat cooker will eventually be removed and replaced by the Dupps meat cooker.

#### Particulate [326 IAC 6-3-2] D.2.4

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emission rate from the inedible rendering process shall not exceed 24.1 pounds per hour when operating at a process weight rate of 14.0 tons per hour. The pounds per hour limit was calculated using the following equation:

Interpolation of the data for the process weight up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour; and  $P =$  process weight rate in tons per hour

D.2.5 Preventive Maintenance Plan [326 IAC 1-6-3]

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

#### **Compliance Determination Requirements**

#### D.2.6 Particulate Control

In order to comply with Conditions D.2.1, D.2.2 and D.2.4 the stord scrubbing system (identified as SC1) for particulate control shall be in operation and control emissions from the inedible rendering process at all times the inedible rendering process is in operation.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.2.7 Visible Emissions Notations

- (a) Once per shift visible emission notations of the stord scrubbing system stack exhausts (identified as SC1) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation and Implementation shall be considered a violation of this permit.

#### D.2.8 Monitoring of Scrubber Operational Parameters

The Permittee shall monitor and record the pressure drop, flow rate and pH across the stord scrubbing system used in conjunction with the inedible rendering process, at least once per shift when the associated inedible rendering process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the venturi scrubber is outside the normal range of 1.0 and 8.0 inches of water, and the pressure drop across the two (2) packed column scrubbers is outside the normal range of 3.0 to 8.0, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C -Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate across the first, second and final stages of the stord scrubbing system (SC1) is less than the normal minimum of 25, 70 and 600 gallons per minute, respectively; or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan -Implementation, Preparation, Records, and Reports. When for any one reading, the pH across the second and final stages of the scrubber is above the normal maximum pH level of 9.0, or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports.

A pressure reading that is outside the above mentioned range, a flow rate that is below the above mentioned minimum, or pH above the mentioned maximum, is not a deviation from this

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permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rate, and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.2.9 Scrubber Inspections

An inspection shall be performed each calendar quarter of each scrubber controlling the rendering process. Inspections required by this condition shall not be performed in consecutive months.

#### D.2.10 Failure Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.2.11 Record Keeping Requirements

- (a) To document compliance with Condition D.2.7, the Permittee shall maintain records of visible emission notations of the inedible rendering process stack exhausts when venting to the atmosphere.
- (b) To document compliance with Condition D.2.8, the Permittee shall maintain records of the following operational parameters for each scrubber once per shift during normal operation:
  - (1) pressure drop;
  - (2) flow rate; and
  - (3) pH level.
- (c) To document compliance with Condition D.2.9, the Permittee shall maintain records of the results of the inspections required under Condition D.2.9.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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#### **SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

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The Dupps meat cooker used in conjunction with the inedible rendering process, with a (h) maximum throughput rate of 65,700 pounds of inedible meat products per hour and controlled by a stord scrubber system (identified as SC1) consisting of two (2) air condensers, one (1) venturi scrubber and two (2) packed column scrubbers. This unit will be modified in 2003.

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(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### Particulate and Volatile Organic Compounds [326 IAC 2-8-4] [326 IAC 2-2] Pursuant to 326 IAC 2-8-4,

- (a) The potential to emit of PM10 from the inedible rendering process shall not exceed 15.2 pounds of PM10 per hour. This limit is equivalent to 66.8 tons per year.
- The potential to emit of VOC from the inedible rendering process shall not exceed 21.1 (b) pounds of VOC per hour. This limit is equivalent to 92.6 tons per year.
- (c) The potential to emit of H<sub>2</sub>S from the inedible rendering process shall not exceed 10.3 pounds per hour of H<sub>2</sub>S. This is equivalent to 45 tons of per year hydrogen sulfide.

Compliance with D3.1(a), D.3.1(b), and D.3.1(c) renders 326 IAC 2-7 (Part 70 Program) not applicable to the source. Compliance with D.3.1(c) renders 326 IAC 2-2 (PSD) not applicable.

#### Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New Facilities - General Reduction Requirements), the inedible rendering process is subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. Pursuant to this rule,

- (a) The Permittee shall operate the Stord scrubbing system, consisting of two (2) air condensers, one (1) venturi scrubber and two (2) packed column scrubbers, at all times when the inedible rendering process is in operation.
- (b) The Permittee shall perform VOC testing as required by Condition 3.7(b).
- The Permittee shall propose a VOC emission limit in pounds per ton of fat processed, (c) based on the result of the stack test.
- (d) The Permittee shall submit an application for a significant permit revision proposing the BACT emission limit no later than sixty (60) days after completion of the stack test in order to include the BACT limit.

#### Operation Of The Meat Cooker

The existing meat cooker shall not operate while the Dupps cooker is in operation. The existing cooker will eventually be removed and replaced by the Dupps meat cooker.

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#### D.3.4 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emission rate from the rendering process shall not exceed 40.8 pounds per hour when operating at a process weight rate of 32.9 tons per hour. The pounds per hour limit was calculated using the following equation:

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Interpolation of the data for the process weight in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$
 where  $E =$ rate of emission in pounds per hour; and  $P =$ process weight rate in tons per hour

#### D.3.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

#### **Compliance Determination Requirements**

#### D.3.6 Particulate Control

In order to comply with Conditions D3.1, D.3.2, and D.3.4, the stord scrubbing system (identified as SC1) consisting of two (2) air condensers, one (1) venturi scrubber and two (2) packed column scrubbers for particulate control shall be in operation and control emissions from the inedible rendering process at all times the inedible rendering process is in operation.

#### D.3.7 Testing Requirements

- (a) During the period between 30 and 36 months after the issuance of this FESOP, in order to demonstrate compliance with Condition D.3.1(a), the Permittee shall perform PM10 testing for the scrubbing system controlling the particulate matter emissions from the inedible rendering process, utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. PM10 includes filterable and condensible PM10. Testing shall be conducted in accordance with Section C Performance Testing.
- (b) The Permittee shall perform VOC and H<sub>2</sub>S testing to demonstrate compliance with D.3.1 and D.3.2 utilizing methods as approved by the Commissioner within sixty (60) days after achieving maximum production rate, but no later than one hundred and eighty (180) days after initial startup.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.3.8 Visible Emissions Notations

- (a) Once per shift visible emission notations of the Stord scrubbing system stack exhausts (identified as SC1) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

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(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a violation of this permit.

#### D.3.9 Monitoring of Scrubber Operational Parameters

The Permittee shall monitor and record the pressure drop, flow rate and pH across the stord scrubbing system (consisting of two (2) air condensers, one (1) venturi scrubber, and two (2) packed column scrubbers) used in conjunction with the rendering process, at least once per shift when the associated rendering process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the venturi scrubber is outside the normal range of 1.0 and 8.0 inches of water, and pressure drop across the two (2) packed column scrubbers is outside the normal range of 3.0 and 8.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C -Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate across the first stage and second stage of the stord scrubbing system (SC1) is less than the normal minimum of 25 and 70 gallons per minute, respectively; or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the pH of any of the scrubbers is above the normal maximum pH level of 9.0, or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mentioned range, a flow rate that is below the above mentioned minimum, or pH above the mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rate, and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.3.10 Scrubber Inspections

An inspection shall be performed each calendar quarter of each scrubber controlling the rendering process. Inspections required by this condition shall not be performed in consecutive months.

#### D.3.11 Failure Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

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Delphi, Indiana FESOP No.: 015-16922-00027

Delphi, Indiana Reviewer: ERG/SD

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.3.12 Record Keeping Requirements

- (a) To document compliance with Condition D.3.8, the Permittee shall maintain records of visible emission notations of the rendering process stack exhausts when venting to the atmosphere.
- (b) To document compliance with Condition D.3.9, the Permittee shall maintain records of the following operational parameters for each scrubber once per shift during normal operation:
  - (1) pressure drop;
  - (2) flow rate; and
  - (3) acid content (pH level).
- (c) To document compliance with Condition D.3.10, the Permittee shall maintain records of the results of the inspections required under Condition D.3.10.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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#### **SECTION D.4**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description[326 IAC 2-8-4(10):

Two (2) natural gas fired carcass hair singer units (identified as HS1 and HS2), each rated at (c) 12.7 MMBtu per hour and exhausting at Stacks HS1 and HS2. These units were installed in 1990.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

There are no specifically applicable regulations that apply to these emission units.

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Delphi, Indiana FESOP No.: 015-16922-00027

Reviewer: ERG/SD

#### SECTION D.5

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

- (e) One (1) blood meal storage silo (identified as BL-1), with a maximum throughput rate of 6,552 tons per year and controlled by a baghouse. **Note:** The maximum throughput rate of the blood meal storage silo is being increased from 3,000 tons per year to 6,552 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.
- (f) One (1) bone meal storage silo (identified as BM-1), with a maximum throughput rate of 143,488 tons per year. Note: The maximum throughput rate of the bone meal storage silo is being increased from 40,000 tons per year to 143,488 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.5.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the bone meal storage silo and blood meal storage silo shall not exceed 26.7 and 3.38 pounds per hour when operating at a process weight rate of 32,760 and 1,496 pounds per hour, respectively.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### D.5.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirements**

#### D.5.3 Particulate Control

In order to comply with condition D.5.1, the baghouse for particulate control shall be in operation and control emissions from the blood meal storage silo at all times that the blood meal storage silo is in operation.

#### D.5.4 Visible Emissions Notations

- (a) Once per shift visible emission notations of the blood meal storage silo baghouse stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

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(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### D.5.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the blood meal storage silo, at least once per shift when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan -reparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.5.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the blood meal storage silo. Inspections are optional when venting indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

#### D.5.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

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Reviewer: ERG/SD

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.5.8 Record Keeping Requirements

- (a) To document compliance with Condition D.5.4, the Permittee shall maintain records of visible emission notations of the blood meal storage silo stack exhaust once per shift.
- (b) To document compliance with Condition D.5.5, the Permittee shall maintain records once per shift of the total static pressure drop during normal operation when venting to the atmosphere.
- (c) To document compliance with Condition D.5.6, the Permittee shall maintain records of the results of the inspections required under Condition D.5.6.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Indiana Packers Corporation Delphi, Indiana

Reviewer: ERG/SD

#### SECTION D.6 FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-8-4(10)]:

(d) Three (3) smoke houses operated in batch operations, each with a maximum throughput rate of 25.6 pounds of wood per hour and 5,000 pounds of pork per hour, controlled by GERMOS GmbH smoke house scrubber and exhausting to smoke vents 1, 2, and 3. These units were installed in 1990.

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(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.6.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from each of the three (3) smoke houses shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.50 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

#### **Compliance Determination Requirements**

#### D.6.2 Particulate Control

In order to comply with Condition D.6.1, the GERMOS GmbH smokehouse scrubber for particulate control shall be in operation and control emissions from the three (3) smokehouses at all times the three (3) smokehouses are in operation.

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#### SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

#### Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities:

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Rendering room scrubber (identified as SC2) associated with the rendering processes for controlling plant ventilation air emissions. This unit will be installed in 2003.
- (b) Natural gas-fired combustion sources each having a heat input equal to or less than ten million (10,000,000) Btu per hour, including heat input.
- (c) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the Permittee, that is, an on-site sewage treatment facility.
- (d) Other emergency equipment as follows: Stationary fire pumps.
- (e) Noncontact cooling tower systems with natural draft cooling tower not regulated under a NESHAP.
- (f) Other emission units and activities with potential emissions below the threshold in 326 IAC 2-7-1(21):
  - (1) Bulk truck loadout by products.
  - (2) Bulk truck loadout rendering process products.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

There are no specifically applicable regulations that apply to these emission units

Indiana Packers Corporation Delphi, Indiana

Reviewer: ERG/SD

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

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FESOP No.: 015-16922-00027

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Indiana Packers Corporation

Source Address: Hwy 421 South and County Road 100 North, Delphi, Indiana 46923 Hwy 421 South and County Road 100 North, Delphi, Indiana 46923

FESOP No.: 015-16922-00027

	This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
	Please check what document is being certified:
9	Annual Compliance Certification Letter
9	Test Result (specify)
9	Report (specify)
9	Notification (specify)
9	Affidavit (specify)
9	Other (specify)
	ertify that, based on information and belief formed after reasonable inquiry, the statements and ormation in the document are true, accurate, and complete.
Sig	nature:
Pri	nted Name:
Titl	e/Position:
Dat	te:

Indiana Packers Corporation Delphi, Indiana

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#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

**COMPLIANCE BRANCH** P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **EMERGENCY OCCURRENCE REPORT**

Source Name: **Indiana Packers Corporation** 

Hwy 421 South and County Road 100 North, Delphi, Indiana 46923 Source Address: Hwy 421 South and County Road 100 North, Delphi, Indiana 46923 Mailing Address:

FESOP No.: 015-16922-00027

#### This form consists of 2 pages

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7	7	

This is an emergency as defined in 326 IAC 2-7-1(12)

CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

CThe Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:					
Control Equipment:					
Permit Condition or Operation Limitation in Permit:					
Description of the Emergency:					
Describe the cause of the Emergency:					

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f any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Y N Describe:	
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are neces imminent injury to persons, severe damage to equipment, substantial loss of capita of product or raw materials of substantial economic value:	
Form Completed by: Title / Position: Date: Phone:	

A certification is not required for this report.

Indiana Packers Corporation Delphi, Indiana Reviewer: ERG/SD

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### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY**

COMPLIANCE DATA SECTION								
	FESOF	Quarterly Report						
Source Name: Source Address: Mailing Address: FESOP No.: Facility:  Parameter: Limit:	Hwy 421 South and Cou 015-16922-00027 Two (2) Cleaver Brooks heat input capacity of 81 backup fuel at a maximu sulfur content of 0.5 per SO <sub>2</sub> and NO <sub>x</sub> Fuel usage limited to a t	unty Road 100 North, Delphi, In unty Road 100 North, Delphi, In boilers (B03 and B04) burning 1.2 MMBtu per hour. These bourn heat input capacity of 1,440	diana 46923  natural gas at a maximum ilers use No. 2 fuel oil as a ,000 MMBtu per hour, with a					
Month	Column 1	Column 2	Column 1 + Column 2					
Month	Gallons of Fuel	Gallons of Fuel	Gallons of Fuel					
	This Month	Previous 11 Months	12 Month Total					
Month 1								
Month 2								
Month 3								
9 No deviation occurred in this quarter. 9 Deviation/s occurred in this quarter. Deviation has been reported on:  Submitted by: Title / Position: Signature: Date:								

Attach a signed certification to complete this report.

Indiana Packers Corporation Delphi, Indiana

Reviewer: ERG/SD

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

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#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: **Indiana Packers Corporation** Source Address: Hwy 421 South and County Road 100 North, Delphi, Indiana 46923 Hwy 421 South and County Road 100 North, Delphi, Indiana 46923 Mailing Address: FESOP No.: 015-16922-00027 Months: \_\_\_\_\_ to \_\_\_\_ Year: \_\_\_\_\_ Page 1 of 2 This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) **Duration of Deviation: Date of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken: Permit Requirement** (specify permit condition #) **Date of Deviation: Duration of Deviation: Number of Deviations: Probable Cause of Deviation:** Response Steps Taken:

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Permit Requirement (specify permit condition #)							
Date of Deviation:	Duration of Deviation:						
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Permit Requirement (specify permit condition #)							
Date of Deviation:	Duration of Deviation:						
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Permit Requirement (specify permit condition #)							
Date of Deviation:	Duration of Deviation:						
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Form Completed By:							
Title/Position:							
Date:							
Phone:							

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Quality

# Addendum to the Technical Support Document (TSD) for a Federally Enforceable State Operating Permit

#### **Source Background and Description**

Source Name: Indiana Packers Corporation

Source Location: Hwy 421 South and County Road 100 North, Delphi, Indiana, 46206

County: Carroll SIC Code: 2077

Operation Permit No.: 015-16922-00027

Permit Reviewer: ERG/SD

On June 25, 2003, the Indiana Department of Environmental Management (IDEM) and Office of Air Quality (OAQ) had a notice published in the Carroll County Comet, Flora, Indiana, stating that Indiana Packers Corporation had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a stationary pork processing and rendering plant with control. The notice also stated that IDEM, OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 3, 1996, Jane Brown, member of the public, submitted comments on the proposed FESOP. The summary of the comment is as follows.

#### Comment 1:

Jane Brown noted that since the source began operation, it has lead to several eye and respiratory problems among the citizens of that area. This was discussed with IDEM, OAQ in a public meeting held in March of 1996. Jane Brown also noted that if the source is given a permit to process hogs at a higher capacity, there will be an increase in odor, which is already unacceptable to the citizens living close to the source location.

#### **Response to Comment 1:**

The OAQ received many comments regarding odor at the 1996 public hearing. While the OAQ lacks specific authority to regulate odor, both the 1996 permit and this permit require the proper operation of the scrubber that controls odor and volatile organic compounds. The OAQ does regulate the emissions of volatile organic compounds. This permit includes a mechanism for establishing a maximum emission limit for these compounds that is reflective of optimal scrubber operation. To the extent that volatile organic compounds are related to odors from the plant, this emission limit will provide an objective standard for evaluating the operation of the scrubber. If

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Indiana Packers Corporation Delphi, Indiana Reviewer: ERG/SD

severe odor problems arise in the future, the OAQ can require that the scrubber be retested and can require corrective actions if the emissions limit is exceeded.

On July 23, 2003, Indiana Packers Corporation submitted comments on the proposed FESOP. The summary of the comments and responses are shown below. Deleted text will be shown as strikeout and new text will be shown as bold.

#### Comment 2:

The source requested a change in the draft Significant Permit Revision (SPR) letter to a FESOP (not yet issued) to correct a rule citation and to emphasis that the existing meat cooker is not Dupps.

#### **Response to Comment 2:**

The SPR was drafted prior to the preparation of FESOP no.: 015-16922-0002. The new construction that was covered by the SPR has been incorporated into this FESOP. Therefore, the SPR to a FESOP (not yet issued) is no longer valid. The comments pertaining to the SPR letter no longer apply.

#### Comment 3:

The source requested removal of Condition D.1.10 (b) because the two (2) boilers (identified as B03 and B04) are subject to a specific opacity limit under 40 CFR 60, Subpart Dc (New Source Performance Standard (NSPS)), when burning fuel oil No. 2 and do not have any applicable compliance monitoring requirement.

#### **Response to Comment 3:**

Condition D.1.10 (b) was incorrectly included in the Federally Enforceable State Operating Permit and has been deleted. The source is required to monitor visual emissions as a means to demonstrate compliance. This record is in the permit. IDEM, OAQ has made the following change to the permit. The remaining conditions were renumbered accordingly.

#### D.1.10 Record Keeping Requirements

(b) To document compliance with Conditions D.1.5, the Permittee shall maintain records of opacity of the two (2) Cleaver Brooks boilers (identified as B03 and B04) stack exhausts when burning No. 2 fuel oil once per shift.

#### Comment 4:

The source requested Condition D.1.10 (c) be modified to reflect the compliance monitoring requirements as described in Condition D.1.9(a), that is to maintain visible emissions notations of the two (2) boilers (identified as B03 and B04) when burning fuel oil No.2.

#### **Response to Comment 4:**

As described in condition D.1.9 (a), once per shift visible emission notations are required when the two (2) boilers (identified as B03 and B04) burn fuel oil No. 2, in order to indicate compliance with limits in 326 IAC 5-1 and with the Opacity Standard in Subpart Dc. The two boilers (identified as B01 and B02) do not burn oil. Therefore these two boilers are not subject to D.1.10(b). Therefore, condition D.1.10 (b) (previously D.1.10(c)) has been changed as follows.

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Indiana Packers Corporation Delphi, Indiana Reviewer: ERG/SD

(eb) To document compliance with Conditions **D.1.5** and D.1.9, the Permittee shall maintain records of visible emission notations of the four (4) two (2) boilers stack exhausts (identified as <del>B01, B02, B03</del> and B04) when burning <del>natural gas</del> fuel oil No. 2 once per shift.

#### Comment 5:

The source requested Condition D.1.11(b) be changed from quarterly reporting to semiannual reporting since the two (2) boilers (identified as B03 and B04) are permitted to use fuel oil No.2 as back-up fuel, and the two (2) boilers will be operating for a relatively small percentage of operating time.

#### **Response to Comment 5:**

IDEM, OAQ believes that a period of time longer than every quarter will usually not provide sufficient reporting of continuous compliance. Therefore, a quarterly submittal to document compliance with the fuel usage limit, as described in Condition D.1.4, is necessary. If oil is not burned during a quarter, then the quarterly report need only say that no oil was burned. The last part of the sentence in Condition D.1.11 (b) has been corrected to reflect the quarterly reporting period. Therefore, Condition D.1.11(b) has been changed as follows.

#### D.1.11 Reporting Requirements

(b) A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the semiannual reporting period quarter being reported.

#### Comment 6:

The source requested an addition of a condition under the record keeping requirements in Section D.1.10 to keep records of the amount of fuel combusted during each day for the four (4) boilers (identified as B01, B02, B03 and B04), as prescribed by 40 CFR 60, Subpart Dc (NSPS) and 326 IAC 12-1.

#### **Response to Comment 6:**

Condition D.1.10 (a)(2) has been modified to include the amount of fuel usage for each day. The condition in the permit has been changed as shown below.

#### D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2, D.1.3, and D.1.4, the Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
  - (2) Actual fuel <del>oil</del> usage **for each day** since last compliance determination period and equivalent sulfur dioxide emissions;

#### Comment 7:

The source requested the last sentence of the facility description (f) in Section D.5 be changed to "Note: The maximum throughput ..." .

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#### **Response to Comment 7:**

Facility description (f) in Section D.5 has been changed as requested by the source. The facility description (f) included in Section A.2 has been corrected so that it agrees with the description shown below:

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(f) One (1) bone meal storage silo (identified as BM-1), with a maximum throughput rate of 143,488 tons per year. **Note:** The maximum throughput rate of the <del>blood</del> **bone** meal storage silo is being increased from 40,000 tons per year to 143,488 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.

#### **SECTION D.5**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

- (e) One (1) blood meal storage silo (identified as BL-1), with a maximum throughput rate of 6,552 tons per year and controlled by a baghouse. **Note:** The maximum throughput rate of the blood meal storage silo is being increased from 3,000 tons per year to 6,552 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.
- (f) One (1) bone meal storage silo (identified as BM-1), with a maximum throughput rate of 143,488 tons per year. **Note:** The maximum throughput rate of the <del>blood</del> **bone** meal storage silo is being increased from 40,000 tons per year to 143,488 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Comment 8:

The source requested the first sentence of Condition D.5.5 (Parametric Monitoring) in Section D.5 be corrected from "blood meat storage silo" to "blood meal storage silo".

#### **Response to Comment 8:**

The first sentence in Condition D.5.5 (Parametric Monitoring) in Section D.5 has been corrected from "blood meat storage silo" to "blood meal storage silo". The change in the permit is shown below.

#### D.5.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the blood meat meal storage silo, at least once per shift when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan-Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### Comment 9:

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The source requested the sentence of the facility description (d) in Section D.6 be changed to "Three (3) smoke houses operated...". The source also requested Condition D.6.1 be changed since the source has now submitted information for the maximum throughput rate for the three (3) smoke houses, which is greater than one hundred (100) pounds of pork per hour.

#### **Response to Comment 9:**

Facility description (d) in Section D.6 has been changed as requested by the source. The facility description (d) included in Condition A.2 has been corrected so that is agrees with the description shown below. Also, since the maximum throughput rate of pork is greater than 100 pounds per hour, Condition D.6.1 has been changed as requested by the source. The following changes have been made to the permit:

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(d) Three (3) smoke houses operated in batch operations, each with a maximum throughput rate of 37.44 tons 25.6 pounds of wood per year hour and 5,000 pounds of pork per hour, controlled by GERMOS GmbH smoke house scrubber and exhausting to smoke vents 1, 2, and 3. These units were installed in 1990.

#### **SECTION D.6**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

(d) Three (3) smoke houses operated in batch operations, each with a maximum throughput rate of 37.44 tons 25.6 pounds of wood per year hour and 5,000 pounds of pork per hour, controlled by GERMOS GmbH smoke house scrubber and exhausting to smoke vents 1, 2, and 3. These units were installed in 1990.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.6.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from any process, not already regulated by 326 IAC 6-1 or any New Source Performance Standard, which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. Therefore, the three (3) smoke houses shall not exceed 0.551 pounds per hour, based on a maximum process weight of less than 100 pounds per hour.

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from each of the three (3) smoke houses shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.50 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 4.10 P <sup>0.67</sup> where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

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#### Comment 10:

The source requested Conditions D.2.8 and D.3.9 be changed so that the pressure drop across the venturi scrubber is prescribed within the range of 1.0 and 8.0 inches of water, or the pressure drop across the two (2) packed column scrubbers is prescribed within the range of 3.0 and 8.0 inches of water. The first stage of the scrubber, which consists of the venturi scrubber, has a lower pressure drop because it does not consist of the converging and diverging cones with an adjustable throat, which would allow the pressure drop to be varied. Therefore, the pressure drop across the venturi scrubber is lower than that across the two (2) packed column scrubbers.

#### **Response to Comment 10:**

Conditions D.2.8 and D.3.9 has been changed as requested by the source due to the reasons stated above. However, the Permittee must monitor the pressure drop across the venturi scrubber and also the two (2) packed column scrubbers. The following changes have been made to the permit:

#### D.2.8 Monitoring of Scrubber Operational Parameters

The Permittee shall monitor and record the pressure drop, flow rate and pH across the stord scrubbing system used in conjunction with the inedible rendering process, at least once per shift when the associated inedible rendering process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the first, second and final stage of the stord scrubbing system venturi scrubber is outside the normal range of 3.0 1.0 and 8.0 inches of water, and the pressure drop across the two (2) packed column scrubbers is outside the normal range of 3.0 to 8.0, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate across the first, second and final stages of the stord scrubbing system (SC1) is less than the normal minimum of 25, 70 and 600 gallons per minute, respectively; or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the pH across the second and final stages of the scrubber is above the normal maximum pH level of 9.0, or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports.

#### D.3.9 Monitoring of Scrubber Operational Parameters

The Permittee shall monitor and record the pressure drop, flow rate and pH across the stord scrubbing system (consisting of two (2) air condensers, one (1) venturi scrubber, and two (2) packed column scrubbers) used in conjunction with the rendering process, at least once per shift when the associated rendering process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across any of the venturi scrubbers is outside the normal range of 3.0 1.0 and 8.0 inches of water, and pressure drop across the two (2) packed column scrubbers is outside the normal range of 3.0 and 8.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate across the first stage and second stage of the stord scrubbing system (SC1) is less than the normal minimum of 25 and 70 gallons per minute, respectively; or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the pH of any of the scrubbers is above the normal maximum pH level of 9.0, or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mentioned range, a flow

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rate that is below the above mentioned minimum, or pH above the mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

#### Comment 11:

The source requested a change in item (f) under Permitted Emission Units and Pollution Control Equipment in the TSD to read bone meal storage silo instead of bone meat storage silo. The source also requested changes in the Compliance Monitoring Section of the TSD as described in Comment 10.

#### **Response to Comment 11:**

No changes have been made to the TSD because the IDEM, OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Upon further review, the IDEM, OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

1. Since the four (4) boilers (identified as B01, B02, B03 and B04) are subject to the Preventive Maintenance Plan (PMP) as described in Condition D.1.6, in order to document compliance with this condition, the Permittee must maintain records of any additional inspections as prescribed by the PMP. Therefore, the following Condition has been added to the permit:

#### D.1.10 Record Keeping Requirements

- (c) To document compliance with Condition D.1.6, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- 2. The sentence in Condition D.5.8 (a) has been corrected from blood meat storage silo to blood meal storage silo as so that it agrees with the facility description (e) in Section D.5. The change in the permit is shown below:

#### D.5.8 Record Keeping Requirements

(a) To document compliance with Condition D.5.4, the Permittee shall maintain records of visible emission notations of the blood meat meal storage silo stack exhaust once per shift.

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for a Federally Enforceable State Operating Permit

#### **Source Background and Description**

Source Name: Indiana Packers Corporation

Source Location: Hwy 421 South and County Road 100 North, Delphi,

Indiana

County: Carroll SIC Code: 2077

Operation Permit No.: 015-16922-00027

Permit Reviewer: ERG/SD

The Office of Air Quality (OAQ) has reviewed a FESOP application from Indiana Packers Corporation relating to the operation of a pork rendering and processing plant.

This FESOP permit contains provisions intended to satisfy the requirements of the construction permit rules.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) Two (2) natural gas fired boilers (identified as B01 and B02), each rated at 29.3 MMBtu per hour and exhausting at Stack B01 and B02. These units were installed in 1990.
- (b) One (1) existing meat cooker used in conjunction with the inedible rendering process, with a maximum process rate of 28,097 pounds of inedible meat products per hour and controlled by a stord scrubber system (identified as SC1), consisting of one (1) 7,000 cubic feet per minute (cfm) venturi scrubber, 7,000 cfm packed tower scrubber, and 60,000 cfm packed tower scrubber. This unit was constructed in 1990. **Note:** The meat cooker will be removed and replaced by a Dupps meat cooker.
- (c) Two (2) natural gas fired carcass hair singe units (identified as HS1 and HS2), each rated at 12.7 MMBtu per hour and exhausting at Stacks HS1 and HS2. These units were installed in 1990.
- (d) Three (3) smoke house units, each with a maximum throughput rate of 37.4 tons of wood per year, controlled by GERMOS Gmbh smoke house scrubber and exhausting to smoke vents 1, 2, and 3. These units were installed in 1990.
- (e) One (1) blood meal storage silo (identified as BL-1), with a maximum throughput rate of 6,552 tons per year and controlled by a baghouse. **Note:** The maximum throughput rate of the blood meal storage silo is being increased from 3,000 tons per year to 6,552 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.

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(f) One (1) bone meal storage silo (identified as BM-1), with a maximum throughput rate of 143,488 tons per year. **Note:** The maximum throughput rate of the blood meal storage silo is being increased from 40,000 tons per year to 143,488 tons per year with the addition of the boilers (B03 and BO4) and the Dupps meat cooker listed below.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-8-4(11):

- (g) Two (2) natural gas fired Cleaver Brooks boilers (identified as B03 and B04), with a combined heat input capacity of 81.2 MMBtu per hour and exhausting at Stack B03 and B04. B03 and B04 use No. 2 fuel oil as back up fuel at a combined heat input capacity of 77.4MMBtu per hour and a sulfur content of 0.5 %. These units will be installed in 2003.
- (h) One (1) Dupps meat cooker used in conjunction with the rendering process with a maximum process rate of 65,700 pounds of inedible meat products per hour and controlled by stord scrubber system (identified as SC1) consisting of two (2) air condensers, one (1) venturi scrubber and two (2) packed column scrubbers. This cooker will replace the existing meat cooker and the control modified in 2003.
- (i) Rendering room scrubber (identified as SC2) associated with the rendering processes for controlling plant ventilation air emissions. This unit will be installed in 2003. [This new unit is an insignificant activity.]

#### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources each having a heat input equal to or less than ten million (10,000,000) Btu per hour, including heat input.
- (b) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the Permittee, that is, an on-site sewage treatment facility.
- (c) Other emergency equipment as follows: Stationary fire pumps.
- (d) Noncontact cooling tower systems with natural draft cooling tower not regulated under a NESHAP.
- (e) Other emission units and activities with potential emissions below the threshold in 326 IAC 2-7-1(21):
  - (1) Bulk truck loadout by products.
  - (2) Bulk truck loadout rendering process products.

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#### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 015-1930-00027, issued on December 4, 1990.
- (b) CP 015-2963-00027, issued June 17, 1996.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this permit:

(a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on April 11, 1996. The source also submitted an application for a permit revision on March 14, 2003. Additional information was received on April 1, 2003, May 6, 2003, and June 12, 2003.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 15).

#### **Potential To Emit for the Source**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant Potential To Emit (tons/year) PM 178 PM10 177 SO<sub>2</sub> 166 VOC 153 CO 76.0 NO<sub>x</sub> 104 452 H₂S

Note: For the purpose of determining Title V applicability for particulates, PM10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Single HAP (Ethylamine)	<10
Combination of HAPs	<25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, VOC,  $SO_2$ , NOx, and  $H_2S$  are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict PTE to below Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP).
- (c) Fugitive Emissions
  Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

		Potential To Emit (tons per year)						
Pollutant	PM	PM10	SO <sub>2</sub>	NOx	VOC	со	H₂S	HAPs
Process Heaters	1.4	1.4	0.11	18	1.0	15.2		
Boilers BO1 and BO2	1.9	1.9	0.15	26	1.4	22		-
HS1 and HS2 Hair Singe Units	0.85	0.85	0.07	11	0.61	9.4		
Bone and blood meal silo	13.2	12.2						
Smoke House	1.3	1.3						
Rendering Process	less than 67	less than 67					less than 45	Total 9.2
Total Existing Source	less than 86	less than 85	0.33	55	3	47	less than 45	Total 9.2
Modification: <sup>a</sup>								
<ul> <li>removal of existing cooker</li> </ul>	-67	-67					-45	-9.2
Addition of new cooker	less than 67	less than 67					less than 45	9.2
<ul> <li>Addition of BO3 and BO4</li> </ul>	2.7	2.7	less than 51	less than 36	2	30		

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Total Source Emission	less than 89	less than 88	less than	less than 91	5	57	less than 45	9.2
with Modification			51					

<sup>&</sup>lt;sup>a</sup> A building scrubber is also being added to reduce odors from the facility.

#### **County Attainment Status**

The source is located in Carroll County.

Pollutant	Status
PM10	Attainment
SO <sub>2</sub>	Attainment
$NO_2$	Attainment
Ozone	Attainment
СО	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Carroll County has been designated as attainment or unclassifiable for ozone.
- (b) Carroll County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### **Federal Rule Applicability**

(a) The two (2) boilers (identified as B01 and B02) are subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) because these boilers were constructed after June 9, 1989 and have heat input capacities greater than 10 MMBtu per hour and less than 100 MMBtu per hour. However, these boilers are subject to only the reporting requirements in 40 CFR 60.48c, because they are natural gas-fired boilers. As per the reporting requirements, the source must maintain daily records of the amount of natural gas combusted. If the source desires to change the timing of the recording of the fuel combusted from daily recording to monthly recording, then the source must submit this request to the following address:

George Czemiak c/o United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17 J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

This request should reference the NSPS requirement.

- (b) The two (2) Cleaver Brooks boilers (identified as B03 and B04) are subject to the New Source Performance Standard, 40 CFR 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) because the boilers were constructed after June 9, 1989 and have a maximum heat input capacities greater than 10 MMBtu per hour and less than 100 MMBtu per hour.
  - (1) Pursuant to 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the sulfur content of the fuel oil burned in the boilers shall not exceed five-tenths percent (0.5%) by weight [40 CFR 60.42c(d)]. This fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

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- (2) Pursuant to 40 CFR 60.43c(c) (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) and 326 IAC 12-1 (New Source Performance Standards), opacity from two (2) Cleaver Brooks boilers (identified as B03 and B04), when firing No. 2 fuel oil shall not exceed:
  - (A) Twenty percent (20%) opacity (six minute average), except for one six (6) minute period per hour of not more than twenty seven percent (27%) opacity; and
  - (B) The PM and opacity standard shall apply at all times, except during periods of startup, shutdown or malfunction.

There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

(c) The two (2) hair singe units (identified as HS1 and H32) are not subject to the requirements of the New Source Performance Standard, (326 IAC 12 (40 CFR 60.50, Subpart E) because the hair singe units do not burn more than 50 percent of municipal type waste as defined in 40 CFR 60.51(b), Subpart E.

The two (2) hair singe units (identified as HS1 and H32) are not subject to the requirements of the New Source Performance Standard, (326 IAC 12 (40 CFR 60.50, Subpart Ce) because the hair singe units do not burn hospital/medical/infectious waste. They burn hair off of animal carcasses.

(d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

#### State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs))

The source was constructed prior to July 27, 1997. Therefore, it was not subject to 326 IAC 2-4.1. The construction of two (2) Cleaver Brooks natural gas fired boilers (identified as B03 and B04) and one (1) Dupps meat cooker used in conjunction with the inedible rendering process will emit less than ten (10) tons per year of a single HAP and twenty-five (25) tons per year of any combination of HAPs. Therefore, the source is not subject to the provisions of 326 IAC 2-4.1.

#### 326 IAC 2-2 (Prevention of Significant Deterioration PSD))

Indiana Packers Corporation was constructed in 1990 and is not in one (1) of the twenty-eight (28) source categories. At the time the source was constructed, the hydrogen sulfide emissions were greater than 250 tons per year. The construction permit for the new source does not discuss PSD or provide a PSD limit; however, a scrubber is required to control VOC. The scrubber reduces hydrogen sulfide emissions to less than 250 tons per year. Therefore, a PSD minor source limit has been added to this permit to specifically address this issue. The source will be limited to 10.3 pounds of hydrogen sulfide per hour from the rendering process. This is equivalent to 45 tons of hydrogen sulfide per year. All other uncontrolled pollutants are less than 250 tons per year. The new meat cooker that replaces the old cooker will be subject to the same limit to maintain the PSD minor source limit.

#### 326 IAC 2-8-4 (Federally Enforceable State Operating Permit (FESOP))

The potential to emit of  $SO_2$ , NOx, VOC, PM10, and  $H_2S$  from the entire source are greater than one hundred (100) tons per year.

(a) In order to limit the source to less than one hundred (100) tons per year of SO<sub>2</sub>, the source has requested a limitation on the sulfur content of the fuel oil burned in the each of the two (2) boilers (identified as B03 and B04) of five-tenths percent (0.5%) by weight, and combined fuel usage limit of 1,440,000 gallons of No.2 fuel oil per twelve (12)

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consecutive month period, with compliance determined at the end of each month. These limits are equivalent to  $SO_2$  emissions of 51.1 tons per year. The combined fuel usage limit of 1,440,000 gallons of No. 2 fuel oil per year is also equivalent to NOx emissions of 35.6 tons per year.

- (b) In order to limit the source to less than one hundred (100) tons per year of VOC, the potential to emit of VOC from the inedible rendering process, shall be limited to 21.1 pounds per hour when the inedible rendering process is in operation. This limit is equivalent to a VOC emission limit of 92.6 tons per year.
- (c) In order to limit the source to less than one hundred (100) tons per year of PM10, the potential to emit of PM10 from the inedible rendering process shall be limited to 15.2 pounds per hour when the inedible rendering process is in operation. This limit is equivalent to PM10 emissions of 66.8 tons per year.
- (d) In order to limit the source to less than one hundred (100) tons per year of H<sub>2</sub>S, the potential to emit of H<sub>2</sub>S from the inedible rendering process shall be limited to 10.3 pounds per hour of H<sub>2</sub>S. This is equivalent to 45 tons of hydrogen sulfide per year.

These limits ensure that  $SO_2$ , NOx, VOC, PM10, and  $H_2S$  emissions from the entire source will be less than one hundred (100) tons per year and renders 326 IAC 2-7 (Part 70 Permit Program) not applicable to the source.

#### 326 IAC 2-6 (Emission Reporting)

This source is located in Carroll County and the potential to emit of all criteria pollutants after issuance of this FESOP is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Boilers

#### 326 IAC 6-2-4(a) (Particulate Emission Limitations for Source of Indirect Heating)

Pursuant to 326 IAC 6-2-4, the particulate emissions from the boilers (identified as B01, B02, B03, and B04), which were constructed after September 21, 1983 shall be limited to the pounds of particulate matter per MMBtu heat input as follows:

Units	Fuel Type	Heat Input Capacity (MMBtu per hour)	Emission Rate (lbs/MMBtu)
Boilers B01 and B02	Natural Gas	58.6	0.38
Boilers B03 and B04	Natural Gas	81.2	0.30
	No. 2 Fuel Oil	77.4	0.30

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These limits are based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

$$Where Pt = Emission Rate Limit (lb/MMBtu)$$

$$Q = Total source heat input capacity rating in MMBtu/hour$$

#### 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)

The two (2) Cleaver Brooks boilers (identified as B03 and B04) when burning No. 2 fuel oil have a potential to emit of sulfur dioxide greater than twenty-five (25) tons per year. Pursuant to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) the  $\rm SO_2$  emissions from the two (2) boilers (identified as B03 and B04) shall each not exceed five-tenths (0.5) pounds per MMBtu for No. 2 fuel oil combustion. Pursuant to 326 IAC 7-2-1 compliance shall be demonstrated on a calender month average.

#### State Rule Applicability - Rendering Process

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

At present, the source is operating one (1) meat cooker used in conjunction with the inedible rendering process, at a maximum process rate of 28,097 pounds per hour. This meat cooker will be removed and replaced by a Dupps meat cooker. The Dupps meat cooker will operate at a maximum process rate of 65,700 pounds per hour and the stord scrubbing system will be modified. Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

(a) The allowable particulate emission rate from an existing meat cooker used in conjunction with the inedible rendering process shall not exceed 24.08 pounds per hour when operating at a process weight rate of 28,097 pounds per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour; and  $P =$  process weight rate in tons per hour

The stord scrubbing system, consisting of one (1) 7,000 cubic feet per minute (cfm) packed tower scrubber, one (1) 7,000 cfm venturi scrubber, and one (1) 60,000 cfm packed tower scrubber, shall be in operation at all times the inedible rendering process is in operation to comply with this limit.

(b) The allowable particulate emission rate from Dupps meat cooker used in conjunction with the inedible rendering process shall not exceed 40.08 pounds per hour when operating at a process weight rate of 65,700 pounds per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$
 where  $E =$ rate of emission in pounds per hour; and  $P =$ process weight rate in tons per hour

The stord scrubbing system, consisting of two (2) air condensers, one (1) venturi scrubber, and two (2) packed column scrubbers, shall be in operation at all times the rendering process is in operation, in order to comply with this limit.

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#### 326 IAC 8-1-6 (New Facilities - General Reduction Requirements)

The operation of inedible rendering processes results in potential VOC emissions greater than twenty-five (25) tons per year. Therefore, it is subject to the requirements of 326 IAC 8-1-6 (New Facilities - General Reduction Requirements).

- (a) Pursuant to CP015-2963-00027, issued on June 17, 1996 and 326 IAC 8-1-6, the Permittee shall operate the scrubbing system, consisting of one (1) 7000 CFM packed tower scrubber, one (1) 7000 venturi scrubber, and one (1) 60,000 CFM packed tower scrubber, at all times when the inedible rendering process is in operation.
- (b) After replacement of the existing cooker with the Dupps meat cooker used in conjunction with the inedible rendering process, the Permittee shall comply with BACT as follows:
  - (1) The Permittee shall operate the Stord scrubbing system, consisting of two (2) air condensers, one (1) venturi scrubber, and two (2) packed column scrubbers, at all times when the inedible rendering process is in operation,
  - (2) The Permittee shall perform VOC testing utilizing methods as approved by the Commissioner within sixty (60) days after achieving maximum production rate, but no later than one hundred and eighty (180) days after initial startup.
  - (3) The Permittee shall determine a VOC emission limit in pounds per ton of fat processed, based on the result of the stack test.
  - (4) The Permittee shall submit an application for a significant permit revision no later than sixty (60) days after the stack test in order to include the BACT limit.

#### State Rule Applicability - Blood Meal and Bone Meal Storage Silos

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the bone meal storage silo and blood meal storage silo shall not exceed 26.7 and 3.38 pounds per hour when operating at a process weight rate of 32,760 and 1,496 pounds per hour, respectively.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The baghouse shall be in operation at all times the blood meal storage silo is in operation, in order to comply with this limit.

Based on potential to emit calculations as shown in Appendix A (page 12 of 15), the particulate emissions from the bone meal silo is 1.2 pounds per hour uncontrolled. Therefore, the source will be in compliance with this rule.

#### State Rule Applicability - Two (2) Hair Singe Units (HS1 and HS2)

#### 326 IAC 4-2-2 (Incinerators)

Prior to the hair singe unit (HS1), the carcasses go through a "dehair" unit which consists of paddles and a hot water spray application. Ninety-nine (99) percent of the animal hair is removed here. The hair drops on the bottom and goes on to the rendering process. Next, the carcasses go through the hair singe units (consisting of an open chamber with a hood on top) where the flames are switched on to remove the hair stubble from the skin. This type of unit is

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not considered an incinerator. Therefore, 326 IAC 4-2-2 (Incinerators) does not apply to these emission units.

#### State Rule Applicability - Three (3) Smoke Houses

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from any process, not already regulated by 326 IAC 6-1 or any New Source Performance Standard, which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. Therefore, the three (3) smoke houses shall not exceed 0.551 pounds per hour, based on a maximum process weight of less than 100 pounds per hour.

The GERMOS GmbH smoke house scrubber shall be in operation and control the exhaust from the smoke houses at all times when the three (3) smoke houses are in operation in order to comply with this limit.

#### State Rule Applicability - Insignificant Activities

There are no specifically applicable regulations that apply to these emission units.

#### **Testing Requirements**

- (a) The Permittee shall perform PM10 testing utilizing methods as approved by the Commissioner to document compliance with 326 IAC 2-8-4. This test shall be repeated at least once every five years from the date of the last valid compliance demonstration. PM-10 includes filterable and condensible PM-10.
- (b) The Permittee shall perform VOC testing utilizing methods as approved by the Commissioner to document compliance with 326 IAC 2-8-4 and 326 IAC 8-1-6. This test shall be repeated at least once every five years from the date of the last valid compliance demonstration.
- (c) The Permittee shall perform H<sub>2</sub>S testing utilizing methods as approved by the Commissioner to document compliance with 326 IAC 2-2 and 326 IAC 2-8-4. This test shall be repeated at least once every five years from the date of the last valid compliance demonstration.

The source is required to conduct stack testing for PM10, VOC, and  $\rm H_2S$  emissions from the stord scrubbing system (identified as SC1) used to control emissions from the inedible rendering process. This testing is required because the inedible rendering process is responsible for almost all of the PM10, VOC, and  $\rm H_2S$  emissions from the source. The scrubbing system must operate correctly in order for this source to comply with the 326 IAC 2-8, 326 IAC 8-1-6, and 326 IAC 2-2.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous

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compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The boilers (identified as B03, and B04) have applicable compliance monitoring conditions as specified below:

Once per shift visible emissions notations of the two (2) boiler stacks exhaust shall be performed during normal daylight operations while fuel oil is being combusted. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating).

- 2. The existing meat cooker used in conjunction with the inedible rendering process has applicable compliance monitoring conditions specified below:
  - (a) Once per shift visible emission notations of the existing meat cooker stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
  - (b) The Permittee shall monitor and record the pressure drop, flow rate and pH across the stord scrubbing system (consisting of one (1) 7,000 cubic feet per minute (cfm) venturi scrubber, 7,000 cfm packed tower scrubber, and 60,000 cfm packed tower scrubber) used in conjunction with the inedible rendering process, at least once per shift when the associated inedible rendering process is in operation, when venting to the atmosphere.

When for any one reading, the pressure drop across the first, second and final stage of the stord scrubbing system is outside the normal range of 3.0 and 8.0

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inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports.

When for any one reading, the flow rate across the first, second and final stages of the stord scrubbing system (SC1) is less than the normal minimum of 25, 70, and 600 gallons per minute, respectively; or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports.

When for any one reading, the pH across the second and final stages of the scrubber is above the normal maximum pH level of 9.0, or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports.

A pressure reading that is outside the above mentioned range, a flow rate that is below the above mentioned minimum, or pH above the mentioned maximum, is not a deviation from this permit.

Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rate, and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

These monitoring conditions are necessary because the stord scrubbing system for the inedible rendering process must operate properly to ensure compliance with 326 IAC 2-2(PSD), 326 IAC 2-8-4 (FESOP), 326 IAC 8-1-6 (BACT), and 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

- 3. The Dupps meat cooker used in conjunction with the inedible rendering process has applicable compliance monitoring conditions specified below:
  - (a) Once per shift visible emission notations of the Dupps meat cooker stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) The Permittee shall monitor and record the pressure drop, flow rate, and pH across the stord scrubbing system (consisting of two (2) air condensers, one (1) venturi scrubber and two (2) packed column scrubbers) used in conjunction with the rendering process, at least once per shift when the rendering process is in operation, when venting to the atmosphere.

When for any one reading, the pressure drop across any of the scrubbers is outside the normal range of 3.0 and 8.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation and Implementation.

When for any one reading, the flow rate across the first stage and second stage of the stord scrubbing system (SC1) is less than the normal minimum of 25 and 75 gallons per minute, respectively; or the minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation Implementation, Records, and Reports.

When for any one reading, the pH of any of the scrubbers is above the normal maximum pH level of 9.0, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan - Preparation and Implementation, Records, and Reports.

A pressure reading that is outside the above mentioned range, a flow rate that is below the above mentioned minimum, or pH above the mentioned maximum is not a deviation from this permit.

Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation, Records, and Reports shall be considered a violation of this permit.

The instrument used for determining the pressure, flow rate and pH shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

These monitoring conditions are necessary because the stord scrubbing system for the inedible rendering process must operate properly to ensure compliance with 326 IAC 2-2(PSD), 326 IAC 2-8-4 (FESOP), 326 IAC 8-1-6 (BACT), and 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

- 4. The baghouse used in conjunction with the blood meal storage silo (identified as BL-1) has applicable compliance monitoring conditions specified below:
  - (a) Once per shift visible emissions notations of the bag house stack exhaust controlling the blood meal storage silo shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for

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this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(b) The Permittee shall record the total static pressure drop across the baghouse controlling the blood meal storage silo, at least once per shift when the blood meal storage silo is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 0.5 to 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouse for the blood meal storage silo must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

#### Conclusion

The operation of this pork processing and rending plant shall be subject to the conditions of the attached proposed FESOP No. 015-16922-00027.

#### **Appendix A: Emission Calculations** Fifty one (51) Process Heaters

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

**FESOP:** 015-16922 PIt ID: 015-00027 Reviewer: ERG/SD

**Date:** June 18, 2003

Potential Throughput **Heat Input Capacity** MMCF/year MMBtu/hour

(51 Units Total) 41.3 362.0

#### Pollutant

1 ondert							
	PM*	PM10*	SO <sub>2</sub>	$NO_x$	VOC	CO	
Emission Factor (lb/MMCF)	7.6	7.6	0.6	100.0	5.5	84.0	
				**see below			
Potential To Emit (tons/year)	1.38	1.38	0.11	18.1	1.00	15.2	

<sup>\*</sup>PM and PM10 emission factors are filterable and condensible PM and PM10 combined.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

MMCF = 1,000,000 Cubic Feet of Gas

#### **METHODOLOGY**

Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) \* 8760 hours/year \* 1 MMCF/1000 MMBtu Potential To Emit (tons/year) = Potential Throughput (MMCF/year) \* Emission Factor (lb/MMCF) \* 1 ton//2000 lbs

See page 2 for HAPs emissions calculations.

<sup>\*\*</sup>Emission factors for NO<sub>x</sub>: Uncontrolled = 100, Low NO<sub>x</sub> Burner = 50, Low NO<sub>x</sub> Burners/Flue gas recirculation = 32

## Appendix A: Emission Calculations Fifty one (51) Process Heaters

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

## HAPs - Organics

Emission Factor (lb/MMCF)	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential To Emit (tons/year)	3.801E-04	2.172E-04	1.357E-02	3.258E-01	6.153E-04

#### HAPs - Metals

Emission Factor (lb/MMCF)	Lead	Cadmuim	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential To Emit (tons/year)	9.049E-05	1.991E-04	2.534E-04	6.877E-05	3.801E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998). Additional HAPs emission factors are available in AP-42, Chapter 1.4.

## Appendix A: Emission Calculations Two (2) Natural Gas Fired Cleaver Brooks Boilers (B03 and B04)

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

SPR: 015-16922 PIt ID: 015-00027 Reviewer: ERG/SD

Date: June 18, 2003

Heat Input Capacity Potential Throughput MMBtu/hour MMCF/year

81.2 (2 Units Total) 711.1

#### Pollutant

Emission Factor (lb/MMCF)	PM*	PM10*	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
	7.6	7.6	0.6	100.0	5.5	84.0
Potential To Emit (tons/year)	2.70	2.70	0.21	**see below 35.6	1.96	29.9

<sup>\*</sup>PM and PM10 emission factors are filterable and condensible PM and PM10 combined.

Emission factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

MMCF = 1,000,000 Cubic Feet of Gas

#### **METHODOLOGY**

Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) \* 8760 hours/year \* 1 MMCF/1000 MMBtu Potential To Emit (tons/year) = Potential Throughput (MMCF/year) \* Emission Factor (lb/MMCF) \* 1 ton//2000 lbs

See page 4 for HAPs emissions calculations.

<sup>\*\*</sup>Emission factors for NO<sub>x</sub>: Uncontrolled = 100, Low NO<sub>x</sub> Burner = 50, Low NO<sub>x</sub> Burners/Flue gas recirculation = 32

# Appendix A: Emission Calculations Two (2) Natural Gas Fired Cleaver Brooks Boilers (B03 and B04)

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

HAPs - Organics

Emission Factor (lb/MMCF)	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential To Emit (tons/year)	7.466E-04	4.267E-04	2.667E-02	6.400E-01	1.209E-03

#### HAPs - Metals

Emission Factor (lb/MMCF)	Lead 5.0E-04	Cadmuim 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential To Emit (tons/year)	1.778E-04	3.911E-04	4.978E-04	1.351E-04	7.466E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998). Additional HAPs emission factors are available in AP-42, Chapter 1.4.

## Appendix A: Emission Calculations Two (2) Cleave Brooks Boilers (B03 and B04) Using No. 2 Fuel Oil

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

Heat Input Capacity

MMBtu/hour

Potential Throughput

kgals/year

0.5

77.4 (2 Units Total) 4677.0

	Pollutant					
	PM/PM10*	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	
Emission Factor (lb/kgal)	2.0	71	20.0	0.34	5.0	
		(142.0 S)				
Potential To Emit (tons/year)	4.7	166.0	46.8	0.8	11.7	

<sup>\*</sup>PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal. Assume all PM emissions are equal to PM10. Note: Emission factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 ( SCC 1-03-005-01/02/03) Supplement E 9/98. 1 gallon of No. 2 Fuel Oil has a heating value of 144,905 Btu per gallon.

#### **METHODOLOGY**

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) \* 8760 hours/year \* 1 kgal/1000 gal \* 1 gal/0.144905 MMBtu Potential To Emit (tons/year) = Potential Throughput (MMCF/year) \* Emission Factor (lb/kgal) \* 1 ton//2000 lbs

See page 6 for HAPs emissions calculations.

# Appendix A: Emission Calculations Two (2) Boilers (B03 and B04) Using No. 2 Fuel Oil

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

#### HAPs - Metals

Emission Factor (lb/MMBtu)	Arsenic	Beryllium	Cadmium	Chromium	Lead
	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential To Emit (tons/year)	1.36E-03	1.02E-03	1.02E-03	1.02E-03	3.05E-03

#### HAPs - Metals (continued)

Emission Factor (lb/MMBtu)	Mercury	Mangamese	Nickel	Selenium
	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential To Emit (tons/year)	1.02E-03	2.03E-03	1.02E-03	5.08E-03

No data was available in AP-42 for organic HAPs.

### **METHODOLOGY**

Potential To Emit (tons/year) = Heat Input Capacity (MMBtu/hr) \* Emission Factor (lb/MMBtu) \* 8760 hours/year \* 1 ton/2000lb

# Appendix A: Emission Calculations Two (2) Boilers (B03 and B04) with Fuel Usage Limit

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

Heat Input Capacity

MMBtu/hr

Fuel Usage Limit

kgals/year

S = Weight % Sulfur

0.5

77.4 (2 Units Total) 1440.0

	Pollutant					
	PM/PM10*	SO <sub>2</sub>	$NO_x$	VOC	CO	
Emission Factor (lb/kgal)	2.0	71	20.0	0.34	5.0	
		(142.0 S)				
Limited PTE (tons/year)	1.44	51.1	14.4	0.24	3.60	

<sup>\*</sup>PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal. Assume all PM emissions are equal to PM10. Note: Emission factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 ( SCC 1-03-005-01/02/03) Supplement E 9/98

#### **METHODOLOGY**

Fuel Usage Limit = 1440 kgal per year or 1,440,000 gallons per year Limited PTE (tons/year) = Throughput (kgals/year) \* Emission Factor (lb/kgal) \* 1 ton/2000 lbs

## Appendix A: Emission Calculations Two (2) Natural Gas Fired Boilers (B01 and B02)

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD

Date: June 18, 2003

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/year

58.6 (2 Units Total) 513.3

#### Pollutant

	PM*	PM10*	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Emission Factor (lb/MMCF)	7.6	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential To Emit (tons/year)	1.95	1.95	0.15	25.7	1.41	21.6

<sup>\*</sup>PM and PM10 emission factors are filterable and condensible PM and PM10 combined.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

#### **METHODOLOGY**

Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) \* 8760 hours/year \* 1 MMCF/1000 MMBtu Potential To Emit (tons/year) = Potential Throughput (MMCF/year) \* Emission Factor (lb/MMCF) \* 1 ton//2000 lbs

See page 9 for HAPs emissions calculations.

<sup>\*\*</sup>Emission factors for NO<sub>x</sub>: Uncontrolled = 100, Low NO<sub>x</sub> Burner = 50, Low NO<sub>x</sub> Burners/Flue gas recirculation = 32

# Appendix A: Emission Calculations Two (2) Natural Gas Fired Boilers (B01 and B02)

**Company Name:** Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

### HAPs - Organics

Emission Factor (lb/MMCF)	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential To Emit (tons/year)	5.390E-04	3.080E-04	1.925E-02	4.620E-01	8.727E-04

### HAPs - Metals

Emission Factor (lb/MMCF)	Lead	Cadmuim	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential To Emit (tons/year)	1.283E-04	2.823E-04	3.593E-04	9.753E-05	5.390E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998). Additional HAPs emission factors are available in AP-42, Chapter 1.4.

## **Appendix A: Emission Calculations** Two (2) Natural Gas Fired Hair Singe (HS1 and HS2)

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

**FESOP**: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD

Date: June 18, 2003

Potential Throughput **Heat Input Capacity** MMCF/year MMBtu/hr

(2 Units Total) 25.4 222.7

#### Pollutant

		1 Onatant				
	PM*	PM10*	SO <sub>2</sub>	$NO_x$	VOC	CO
Emission Factor (lb/MMCF)	7.6	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential To Emit (tons/year)	0.85	0.85	0.07	11.1	0.61	9.35

<sup>\*</sup>PM and PM10 emission factors are filterable and condensible PM and PM10 combined.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

#### **METHODOLOGY**

Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) \* 8760 hours/year \* 1 MMCF/1000 MMBtu Potential To Emit (tons/year) = Potential Throughput (MMCF/year) \* Emission Factor (lb/MMCF) \* 1 ton//2000 lbs

See page 11 for HAPs emissions calculations.

<sup>\*\*</sup>Emission factors for NO<sub>x</sub>: Uncontrolled = 100, Low NO<sub>x</sub> Burner = 50, Low NO<sub>x</sub> Burners/Flue gas recirculation = 32

# Appendix A: Emission Calculations Two (2) Natural Gas Fired Hair Singe (HS1 and HS2)

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

## HAPs - Organics

Emission Factor (lb/MMCF)	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential To Emit (tons/year)	2.338E-04	1.336E-04	8.350E-03	2.004E-01	3.786E-04

#### HAPs - Metals

Emission Factor (lb/MMCF)	Lead	Cadmuim	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential To Emit (tons/year)	5.567E-05	1.225E-04	1.559E-04	4.231E-05	2.338E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998).. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

#### Appendix A: Emission Calculations PM/PM10 Emissions From Bone Meal and Blood Meal

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

POTENTIAL TO EMIT PM/PM10 FROM BLOOD MEAL STORAGE SILO									
After Control Before Control									
*PM Control Equipment = Baghouse		(ton/year)	(ton/year)	(lb/hr)					
Grain Loading in grains/acf =	0.01	0.12	12.0	2.74					
Air Flow Rate in acf/min =	320								
Control Efficiency in % =	99%								

<sup>\*</sup> Assume all PM emissions are equal to PM10

#### **METHODOLOGY**

#### After Control

PTE PM/PM10 (ton/year) = Grain loading (grains/acf) \* Air flow rate (acf/min) \* 60 min/hour \* 1 lb/7000 grains \* 8760 hour/year \* 1ton /2000 lbs **Before Control** 

PTE PM/PM10 (ton/year) = Grain loading (grains/acf) \* Air flow rate (acf/min) \* 60 min/hour \* 1 lb/7000 grains \* 8760 hour/year \* 1ton /2000 lbs \* 1/(1-Control efficiency %)

PTE PM/PM10 (lbs/hour) = Grain loading (grains/acf) \* Air flow rate (acf/min) \* 60 min/hour \* 1 lb/7000 grains \* 1/(1-Control efficiency % )

#### POTENTIAL TO EMIT PM/PM10 FROM BONE MEAL STORAGE SILO

Maximum Throughput Rate	* Emission Factor PM	PTE PM	PTE PM	* Emission Factor PM10	PTE PM10	PTE PM10
(ton/year)	(lb/ton)	(lb/hr)	(ton/year)	(lb/ton)	(lb/hr)	(ton/year)
143488	0.017	0.28	1.2	0.0025	0.04	0.18

<sup>\*</sup> Emission factor from AP-42, Chapter 9.9.1, Table 9.9.1-2, SCC 3-02-008-02 (March, 2003).

Note: Emission factor for PM/PM10 from AP-42, Chapter 9.9.1 (Animal Feed Mills) was used to calculate emissions from the bone meal storage silo because it represented a similar loading proces

#### **METHODOLOGY**

PTE PM/PM10 (lbs/hour) = Maximum throughput rate (tons/year) \* Emission factor (lb/ton) \* 1 year/8760 hours PTE PM/PM10 (ton/year) = Maximum throughput rate (tons/year) \* Emission factor (lb/ton) \* 1 ton /2000 lbs

## Appendix A: Emission Calculations From Rendering Process

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 PIt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

### POTENTIAL TO EMIT AFTER CONTROLS

Unit	PM/ PM10		NO <sub>X</sub>		VOC		H <sub>2</sub> S		Ethylamine	
	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)
Rendering Process	7.1	30.95	0.58	2.56	3.33	14.59	10.32	45.20	0.21	0.92

Note: The pound per hour emission rates are based on the stack tests results performed at the source on February 5, 1992 and May 30, 1996.

The tests were conducted after controls at the maximum process rate for the rendering process.

#### POTENTIAL TO EMIT BEFORE CONTROLS

Control Efficiency of the 40,000 cfm Packed Bed Scrubber for PM/PM10 = 80%Control Efficiency of the 40,000 cfm Packed Bed Scrubber for VOC and  $H_2S$  = 90%

	Unit	PM/ PM10		NO <sub>X</sub>		VOC		H₂S		Ethylamine	
		(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)
Ren	dering Process	35.3	154.8	0.58	2.56	33.30	145.85	103.20	452.0	2.10	9.20

#### **METHODOLOGY**

PTE after control (tons/year) = Emission Rate (lb/hour) \* 8760 hours/year \* 1 ton/2000 lbs

PTE before control (lbs/hour) = Emission Rate (lb/hour) \* 1/(1-control efficiency %)

PTE before control (tons/year) = Emission Rate (lb/hour) \* 8760 hours/year \* 1 ton/2000 lbs \* 1/(1-control efficiency %)

# Appendix A: Emission Calculations From Three (3) Smoke Houses

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922 Plt ID: 015-00027 Reviewer: ERG/SD Date: June 18, 2003

Unit	Maximum Thro	ughput of Wood	*E.F PM	PTE PM/PM10	*E.F VOC	PTE VOC
	(lbs/hour)	(tons/hour)	(lbs/ton)	(tons/year)	(lbs/ton)	(tons/year)
Three (3) Smoke House	25.64	0.013	23	1.29	44	2.47

<sup>\*</sup> Emission factors are from AP-42, Chapter 9.5, Table 9.5.2-1 and 9.5.2-2, SCC 3-02-013-02 (September, 1995).

#### **METHODOLOGY**

PTE (tons/year) = Maximum throughout of wood (tons/hour) \* Emission factor (lb of pollutant / ton of wood burned) \* 8760 hours/year \* 1 ton/2000 lbs.

## Appendix A: Emission Calculations Summary

Company Name: Indiana Packers Corporation

Address: Hwy 421 South, County Road 100 North, Delphi, IN 46923

FESOP: 015-16922
PIt ID: 015-00027
Reviewer: ERG/SD
Date: June 18, 2003

#### POTENTIAL TO EMIT BEFORE CONTROLS IN TONS PER YEAR

Facilities	PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	H₂S	HAPs
B03 and B04 Boilers Burning NG	2.70	2.70	0.21	35.6	1.96	29.9		
B03 and B04 Boilers Burning No.2 Fuel Oil	4.68	4.68	166	46.8	0.60	11.7		
Worst Case Emissions	4.68	4.68	166	46.8	1.96	29.9		
Process Heaters	1.38	1.38	0.11	18.1	1.0	15.2		
B01 and B02 Boilers Burnign NG	1.95	1.95	0.15	25.7	1.41	21.6		
HS1 and HS2 Hair Singers Burning NG	0.85	0.85	0.07	11.1	0.61	9.35		
Bone and Blood Meal	13.2	12.2						
Smoke House	1.29	1.29			2.47			
Rendering Process	155	155		2.56	146		452	9.20
Sum	178	177	166	104	153	76.0	452	9.20

## POTENTIAL TO EMIT IN TONS PER YEAR AFTER CONTROLS AND A FUEL USAGE LIMIT OF No. 2 FUEL OIL BURNED

Facilities	PM	PM10	SO <sub>2</sub>	$NO_x$	voc	co	H₂S	HAPs
B03 and B04 Boilers Burning NG	2.70	2.70	0.21	35.6	1.96	29.87		
B03 and B04 Boilers Burning No.2 Fuel Oil	1.44	1.44	51.1	14.4	0.24	3.60		
Worst Case Emissions	2.70	2.70	51.1	35.6	1.96	29.9		
Process Heaters	1.38	1.38	0.1	18.1	1.00	15.2		
B01 and B02 Boilers Burnign NG	1.95	1.95	0.15	25.7	1.41	21.6		
HS1 and HS2 Hair Singers Burning NG	0.85	0.85	0.07	11.1	0.61	9.35		
Bone and Blood Meal	13.2	12.2						
Smoke House	1.29	1.29			2.47			
* Rendering Process	67	67		2.56	14.6		45.2	0.92
Sum	88	87	51	93	22	76	45	0.92